## CITY OF LODI INFORMAL INFORMATIONAL MEETING "SHIRTSLEEVE" SESSION CARNEGIE FORUM, 305 WEST PINE STREET TUESDAY, SEPTEMBER 19, 2006

An Informal Informational Meeting ("Shirtsleeve" Session) of the Lodi City Council was held Tuesday, September 19, 2006, commencing at 7:05 a.m.

#### A. ROLL CALL

Present: Council Members – Beckman, Hansen, Johnson, Mounce, and Mayor Hitchcock

Absent: Council Members – None

Also Present: City Manager King, Deputy City Attorney Magdich, and Deputy City Clerk Taylor

#### B. TOPIC(S)

B-1 "Presentation regarding playground equipment safety standards"

Parks Superintendent, Steve Dutra, shared that public playgrounds offer a great outlet for physical, emotional, social, and intellectual development of children at play, but kids play hard and can become injured. Focusing on safety in designing and installing equipment in City parks, he shared a number of statistics and mandated requirements with regard to public playgrounds in a PowerPoint presentation (filed). He stated that he and Parks Mechanic Larry Moore are Certified Playground Safety Inspectors, having completed training, extensive reading, an examination, and continued education for re-certification. He stated that during the past two decades, the US Consumer Product Safety Commission (CPSC) statistics indicate a dramatic increase in playground-related injuries, and at least 70% of these injuries occur on public playgrounds. Entrapments, falls to the surface, and equipment maintenance are factors that must be monitored as they are the responsibility of the equipment owner. Guidelines are provided with regard to age appropriateness of equipment and critical height, which considers not only the distance a child may fall but also the material on the surface located under and around the equipment. As a government agency, the City is mandated by the Health and Safety Code to comply with sections of the Handbook for Public Playground Safety #325, which presents safety information for public playground equipment, and the Standard Consumer Safety Product Specifications for the playground equipment for public use.

The American Society for Testing and Materials (ASTM) outlines nationally recognized standards for consumer safety product performance specifications for playground equipment for public use. Preventive maintenance is specified as planned programs of inspections and maintenance intended to keep equipment functioning properly and to forestall equipment failures. Public playground equipment must be designed and constructed to reduce the risk of accidents related to head and neck entrapments. Slides that are less than 48 inches tall must have an exit region height no greater than 11 inches from the protected surface; however, slides taller than 48 inches require that the exit region height be between 7 and 15 inches above the protected surface. The City is required to maintain detailed records regarding installation, inspections, maintenance, and repairs to equipment and use areas as mandated by law.

Larry Moore, Parks Division Mechanic, stated that he is responsible for the overall maintenance and inspection of 22 playground structures at 17 community locations. The Parks Division has an established playground safety program, which was developed by Mr. Dutra in 2002 based on the CPSC and ASTM guidelines. Program goals include providing quality facilities, preventing injuries, and protecting the City investment. The program calls for daily, weekly, monthly, and annual inspections. Inspections are done daily and weekly by park maintenance staff looking for inappropriate materials, vandalism, graffiti, and broken equipment. Play areas are cleaned, weeded, painted, and ground cover is raked as needed. Monthly inspections are completed by a certified playground safety inspector that walks the area, climbs equipment, looks for loose and missing hardware, checks the

protective surfacing depth, and completes preventive maintenance. Annual inspections are based on monthly inspections and include determining level of use, setting goals, preparing the budget, comparing products, and scheduling maintenance. He shared that while the City uses engineered wood fiber for surface cover, it has also used poured-in-place surfaces which perform well.

Mr. Dutra shared that 11 community parks meet current standards and 6 parks need to be addressed on some level. Emerson Park has been refurbished to meet codes based on the hard work of staff and the ability to utilize Community Development Block Grant (CDBG) funding. The original structure had a play area and swings in close proximity located near the street intersection; however, a swing bay requires a fall zone of 32 feet in clearance. The new design at Emerson Park features a swing set area separate from the play structure to meet new design criteria based on safety guidelines and laws.

Mayor Pro Tempore Johnson stated that many parks were refurbished using CDBG funds and asked where the City will get the money to replace structures that still need to be replaced but are not a part of the CDBG target area. Mr. Dutra stated that only Blakely, Hale, and Van Buskirk Parks are in the target area and that these funds can be used for refurbishing Van Buskirk Park; however, Beckman Park is outside the target area but needs to be refurbished next based on inspections. State and federal grants, community organizations, and donations can offer funding opportunities to secure approximately \$200,000 each for the remaining parks requiring completion. He shared that, while Beckman Park also needs a restroom replacement and that every effort would be made to complete these projects together, there are other projects higher on the list than the Beckman bathroom replacement at this time. He notified Council that Beckman Park playground area will be taken out of service due to safety concerns and a temporary fence will be installed to ensure public safety until the work can be completed.

City Manager King shared that, until recently, playground equipment designed to CPSC guidelines allowed cities to defend their efforts toward liability compliance by purchasing approved equipment. Everything changed to a mandated requirement when relatively new pieces of equipment did not comply with the standards of entrapment, requiring cities to make a risk management choice. Over the last several years many cities have used per capita money to replace equipment; however, the money can only be used for equipment, not park maintenance, and many times projects may require increasing work and equipment to spend more money in order to be eligible for grant funds.

Mayor Pro Tempore Johnson stated that there are minimum standards in place, and the City appears to have exceeded them in placing pour-in-place surfaces instead of wood fibers. He asked if the City is placing itself into a risk management corner by spending more than necessary in protecting users of the equipment by using pour-in-place surfaces when other communities are still using wood chips. Deputy City Attorney Magdich replied that as long as the city is meeting the standards of the Health and Safety Code and the California law requirements, it is acceptable to use either or both surfaces as determined appropriate by safety inspectors and park designers.

Mr. King stated that, while the poured-in-place surface is still being reviewed and tested for its long-term durability, replacement compound is available for repairs and pour-in versus wood chips which need raking on a consistent basis, which is a very labor intensive process. Mr. Dutra shared that Lawrence Park was the first park to receive poured-in-place surfacing through a ecycled tire grant for \$25,000. He stated that it costs \$12.25 per square foot, must be sub-graded and compacted, and seal coated every five years, which is why the parks division has a supply of patching materials on hand filled with additional product.

Mr. Dutra shared that Candy Cane Park has been maintained in part by the generosity of the Soroptimist Club and that perhaps funding can continue in the future on that and other parks. Lodi Lake Park contains two structures and the Kiwanis Club and other area organizations have provided support of parks projects – staff will continue to explore and entertain these funding options. The Lodi Lake Park (north) was completed in the late 1980s and the south playground was replaced in the late 1990s. Van Buskirk Park was modified in the late 1990s with separate areas for the play area and a swing. Blakely Park was considered sound, solid, and without rust; however, entrapments were discovered making the equipment a safety hazard. He explained that an entrapment is any opening between 3.5 inches and 9 inches, which could provide a potential hazard for a child's head or neck.

Mayor Hitchcock stated that the repairs and upgrades presented a pattern in replacement approximately every ten years and asked about the comparison of public park equipment versus that used on school campuses, which appear to have little repair or replacement. Mr. King shared that he believed it was a risk management decision in which a policy decision is made to take the calculated risk that no injuries will occur. The alternative may be to close or tear down equipment and haul it away due to a lack of funding, which could have more negative repercussions in the community than leaving it there and hoping no claims are filed.

Mayor Pro Tempore Johnson remarked that at one time the City attempted to help the school district maintain its play areas when Parks Division target areas were much larger.

Mr. Dutra summarized that seven locations and eight structures need replacement at an approximate cost of \$2 million, or \$200,000 per project. In 1999, then Governor Davis signed Assembly Bill 1055 requiring all agencies to have their play structures audited by a certified inspector, and documentation has been retained to indicate upgrades and replacement. The initial audit identifies the play components existing in the play area, their present condition, and how they measure against current laws and guidelines. It also details the layout, design, surrounding environment, handicap accessibility, and protective surfacing. Mr. Moore will be charged with determining if play structures are in compliance based on current standards, and results of the audit will be provided to Council for information in making future decisions.

In response to Mayor Hitchcock, Mr. Dutra explained that the standards were originally drafted in the late 1970s by a group of architects, play equipment manufacturing representatives, and parks professionals. Based on their expertise and field experience, the group provided feedback to the CPSC, which developed the standards for the playgrounds, and since then the California Health and Safety Code has adopted laws based on these guidelines as criteria for the standards.

Mr. King stated that a society has evolved, accidents no longer occur - someone is at fault. As a result, public agencies determined that a standard was needed and guidelines were developed for playground safety maintenance to include inspections to defend against liability claims. The California Parks and Recreation Society and some playground equipment manufacturers advocated that the standard be moved to a mandatory requirement and that inspections be completed by trained and certified inspectors. The City can do a better job in looking at both preventive maintenance and funding for replacement to replace things on a regular basis because things wear down and standards change. Staff takes seriously its obligation to provide safe equipment for children to play on while complying with a reasonable plan for supporting policy makers in preparing for maintenance and replacement of playground equipment and facilities.

Deputy City Attorney Magdich shared that there is a balance between risk and cost, stating that only one park playground-related claim was filed in the past year for a broken arm, which occurred at Peterson Park (east), which is a park that is in complete compliance.

#### C. <u>COMMENTS BY THE PUBLIC ON NON-AGENDA ITEMS</u>

None.

#### D. <u>ADJOURNMENT</u>

No action was taken by the City Council. The meeting was adjourned at 8:04 a.m.

ATTEST:

Jacqueline L. Taylor Deputy City Clerk **AGENDA TITLE:** 

Playground Safety Standards

**MEETING DATE:** 

September 19, 2006

PREPARED BY:

Parks and Recreation Director

RECOMMENDED ACTION:

That City Council members receive a report from Parks Division

staff regarding playground equipment safety standards.

BACKGROUND INFORMATION:

There are currently twenty-one playgrounds in the City of Lodi's park system. Many users, on a daily basis, enjoy the play features at our playgrounds. Parks Division staff is responsible for providing a safe and enjoyable experience at these facilities. An important part of ensuring a safe experience is the ongoing inspection of the

playground equipment.

To accomplish this task, the Division has developed:

design criteria,

installation and certified inspection standards for newly installed facilities, and

a systematic inspection program for existing facilities.

The Parks Division provides staff clear expectations and on-going documented training. The Division is fortunate to have two Certified Playground Safety Inspectors on staff. The objectives of this presentation are to provide City Council with a status report regarding the condition of our playgrounds in the City, describe our systematic processes for playground equipment design, installation and maintenance, and provide an overview of the laws and regulations governing playground safety.

FISCAL IMPACT:

None

FUNDING AVAILABLE:

N/A

Tony C. Goehring

Parks and Recreation Director

TCG/SD:tl

APPROVED:

Blair King City-Manage



### Benefits of Public Playgrounds

- Physical
- Emotional
- Social
- Intellectual Development



# US Consumer Product Safety Commission Statistics

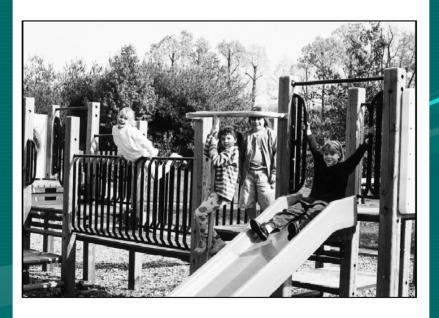
- Every 2 ½ minutes
- > 200,000 playground-related injuries every year
- 70% occur on public playgrounds
- 70% are contributed to falls
- 34% maintenance related
- #1 cause of fatalities Entrapments

# Government Agency Mandatory Duties

- Health and Safety Code
- Handbook for Public Safety
- Publication # 325 of CPSC
- Standard Consumer Safety Performance
   Specifications for Playground Equipment for Public Use

## Handbook for Public Safety

## Handbook for Public Playground Safety





U.S. Consumer Product Safety Commission Washington, DC 20207

#### **CPSC** Guidelines

#### Contents:

Age – Appropriate, School age vs. Preschool

**Definitions** – Critical Height, Entrapment, Use Zone, Protective barrier,

**Surfacing** – Head injury criteria, Critical height, fall height of equipment, Loose fill material

## Surfacing

TABLE 1 — CRITICAL HEIGHTS (in feet) OF TESTED MATERIALS				
MATERIAL	UNCOMPRESSED DEPTH			COMPRESSED DEPTH
	6 inch	9 inch	12 inch	9 inch
Wood Chips*	7	10	11	10
Double Shredded Bark Mulch	6	10	11	7
Engineered Wood Fibers**	6	7	>12	6
Fine Sand	5	5	9	5
Coarse Sand	5	5	6	4
Fine Gravel	6	7	10	6
Medium Gravel	5	5	6	5
Shredded Tires***	10-12	N/A	N/A	N/A

#### **ASTM Standards**

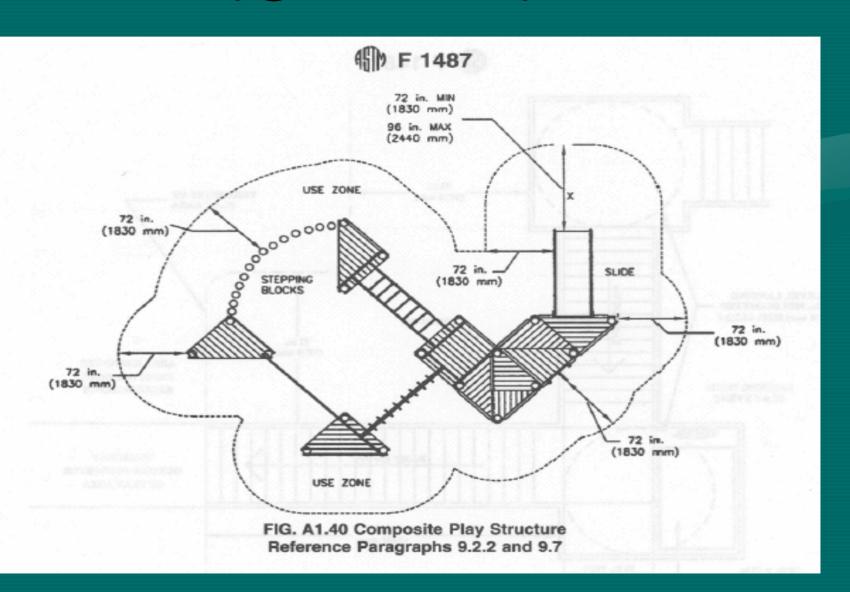
- Standard Consumer Safety Performance Specification for Playground Equipment for Public Use
- Scope
- Contents
- Terminology Preventive Maintenance,
   Professional Judgment
- Performance Requirements Head and Neck entrapments
- Equipment Slides 8.5.5.3

#### **ASTM Standards**

- Playground Layout Use
   Zone 9.1.1
- Maintenance Public
   Use Playground
   Equipment, Protective
   Surfacing and Records



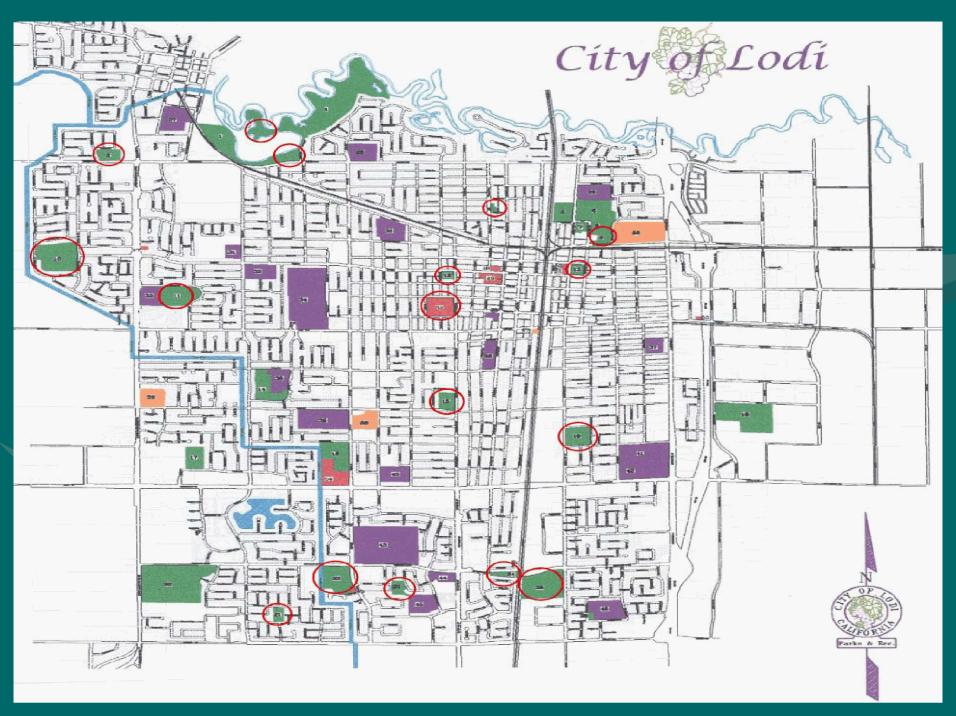
#### Playground Layout



# Playground Locations 22 Structures at 17 Locations

- Katzakian Park
- Peterson Park (2)
- Henry Glaves Park
- Van Buskirk Park
- Lawrence Park
- Emerson Park (2)
- Hutchins ST. SQ.
- Lodi Lake Park (2)

- Hale Park (2)
- Legion Park
- Blakely Park
- Beckman Park
- Century Park
- English Oaks Common (2)
- Salas Park
- Century Meadows Park
- Candy Cane



#### Playground Safety Program

- Produced
- 2002 Steve Dutra
- ASTM Standards
- CPSC Guidelines

- Goals
- Provide Quality Facilities
- Prevent Injuries
- Protect Investment

## Inspections

- Daily
- Weekly
- Monthly
- Annual Review



#### Daily Inspections

- Parks Maintenance Staff
- Visual Inspection Broken Equipment,
   Vandalism, Graffiti
- Hazard removal Glass, Twigs, Inappropriate material, Trash
- Report issues Supervisor or Parks Mechanic

#### Remove Hazard ASAP!!

- Typical Daily Findings
- Level of Hazard
- Repair
- Replace
- Take Out of Service





### Weekly Inspections

- Preventative Maintenance
- Rake Surface Material
- Replenish Surface Material
- Weed Control
- Paint
- Lube



#### Monthly Inspections

- Documented
- Certified Playground Safety Inspector
- Walk and Climb Equipment
- Loose and Missing Hardware
- Wear Items (S-Hooks, Pendulums, Swing Seats)
- Protective Surfacing Depth
- Preventative Maintenance

#### **Monthly Inspections**

- Typical Monthly Findings
- Level of Hazard
- Repair
- Replace
- Take Out of Service





>0.04 in. (1.0mm)

#### Out Of Service

- Vandalism
- \$2700.00
- 6 to 8 Weeks
- Twice Annually





#### **Annual Review**

- Based on Monthly Inspections
- Determine Level of Use
- Prepare Budget
- Set Goals
- Schedule Maintenance
- Compare Products





#### Status

- Katzakian Park
- Peterson Park (2)
- Henry Glaves Park
- Van Buskirk Park
- Lawrence Park
- Emerson Park (2)
- Hutchins ST. SQ.
- Lodi Lake Park (2)

- Hale Park (2)
- Legion Park
- Blakely Park
- Beckman Park
- Century Park
- English Oaks Common (2)
- Salas Park
- Century Meadows Park
- Candy Cane

#### Audit

- Purpose
- ID Non-Compliance
- Current Standards
- Develop Systematic
   Approach to Remove
   Dangerous Equipment





